

(12) United States Patent

Hawkins et al.

(54) MULTI-CONTEXT ITERACTIVE DIRECTORY FILTER

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This patent is subject to a terminal dis-

claimer.

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See application file for complete search history.

(56)**References Cited**

U.S. PATENT DOCUMENTS

4/1971 Bartlett et al. 3.573.376 A 4,279,021 A 7/1981 See et al. 4,415,065 A 11/1983 Sandstedt 4,545,023 A 10/1985 Mizzi 5/1986 Straton et al. 4,587,630 A (Continued)

FOREIGN PATENT DOCUMENTS

CA EP 2187050 5/1997 0149762 A1 7/1986 (Continued)

OTHER PUBLICATIONS

U.S. Appl. No. 07/831,671.

(Continued)

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ABSTRACT

On a device having keys with multiple values, a user may perform either an iterative directory filtering operation or a direct-dial operation, without specifying which of the operations is intended. Hence, a user is allowed to perform any of a number of different operations to specify a number to be dialed or to identify a directory record, without requiring the user to specify a mode. A user's intended operation is determined by analyzing the entered keystrokes, and activates the appropriate feedback and functionality for the determined operation. In one embodiment iterative directory filtering is performed on multiple fields concurrently, including derived fields and combination fields.

25 Claims, 15 Drawing Sheets

